



State Revolving Fund Loan Programs

Drinking Water, Wastewater, Nonpoint Source

ENVIRONMENTAL ASSESSMENT AND FINDING OF NO SIGNIFICANT IMPACT

TOWN OF GREENVILLE

New Water Tank, Water Main & Booster Station

STATE REVOLVING FUND PROJECT DW 10 15 22 01

DATE: July 5, 2011

TARGET PROJECT APPROVAL DATE: August 4, 2011

I. INTRODUCTION

The above entity has applied to the State Revolving Fund (SRF) Loan Program for a loan to finance all or part of the water project described in the accompanying Environmental Assessment (EA). As part of facilities planning requirements, an environmental review has been completed which addresses the project's impacts on the natural and human environment. This review is summarized in the attached EA, which can also be viewed at <http://www.in.gov/ifa/srf/>.

II. PRELIMINARY FINDING OF NO SIGNIFICANT IMPACT (FNSI)

The SRF has evaluated all pertinent environmental information regarding the proposed project and determined that an Environmental Impact Statement is not necessary. Subject to responses received during the 30-day public comment period, and pursuant to Indiana Code 4-4-11, it is our preliminary finding that the construction and operation of the proposed facilities will result in no significant adverse environmental impact. In the absence of significant comments, the attached EA shall serve as the final environmental document.

III. COMMENTS

All interested parties may comment upon the EA/FNSI. Comments must be received at the address below by the deadline date above. Significant comments may prompt a reevaluation of the preliminary FNSI; if appropriate, a new FNSI will be issued for another 30-day public comment period. A final decision to proceed, or not to proceed, with the proposed project shall be effected by finalizing, or not finalizing, the FNSI as appropriate. Comments regarding this document should be sent within 30 days to:

Max Henschen
Senior Environmental Manager
State Revolving Fund
100 N. Senate Ave. IGCN 1275
Indianapolis, IN 46204
317-232-8623; mhensche at ifa.in.gov

ENVIRONMENTAL ASSESSMENT

I. PROJECT IDENTIFICATION

Project Name and Address:	Town of Greenville New Water Tank, Water Main & Booster Station 9706 Clark Street P.O. Box 188 Greenville, IN 47124
SRF Project Number:	DW 10 15 22 01
Authorized Representative:	Talbotte Richardson, Town Council President

II. PROJECT LOCATION

The project is located in Greenville civil township in Floyd County, in the Georgetown 7.5 minute USGS quadrangle, T2S, R5E. The proposed Greenville elevated storage tank is located in the SW $\frac{1}{4}$ NW $\frac{1}{4}$ NE $\frac{1}{4}$ Section 5. The booster pump station and the water main extension are located in the SW $\frac{1}{4}$ and SE $\frac{1}{4}$ respectively of Section 11. Figure 1 illustrates the proposed project sites.

III. PROJECT NEED AND PURPOSE

The Greenville Water Utility does not have adequate water storage, and the existing storage tanks need repair. Presently there are approximately 110,000 gallons of storage, but an average day demand of approximately 390,000 gallons. The proposed new elevated storage tank would provide the needed storage capacity. See Figure 2.

The Greenville Water Utility obtains all of its water supply from other water utilities. During peak demand periods, water supply is insufficient. The lack of an adequate supply has resulted in water shortages, low tank levels, low system pressures and restrictions on water consumption. The Utility has a contract with Indiana American Water Company to purchase water, but the water pressure from Indiana American is lower than that of the Greenville Water Utility at the current connection point. The proposed booster station relocation and associated proposed water main will provide a new connection between the two systems with increased water pressure from the Indiana American. See Figure 3.

IV. PROJECT DESCRIPTION

Greenville proposes to replace the 100,000 gallon standpipe with a 400,000 gallon elevated storage tank, which will provide more water storage and slightly higher pressures. The town also proposes to relocate a booster pump station and to extend water mains to connect with the Greenville water distribution system and the Indiana American system. The booster pump station and associated line will permit an alternative water supply for the utility.

V. ESTIMATED PROJECT COSTS, AFFORDABILITY AND FUNDING

A. Selected Plan Estimated Cost Summary

Construction Costs

Water Main, Booster Pump Station and Elevated Storage Tank Improvements	\$ 837,500
Contingency	83,750
Total Estimated Construction Cost	\$ 921,250

Non-Construction Costs

Engineering, Legal and Financial	\$ 156,000
Total Estimated Project Cost	\$1,077,250

- B.** Greenville will finance the project with a 20-year loan of approximately \$1,077,250 from the State Revolving Fund (SRF) Loan Program at an interest rate to be determined at the time of loan closing. Monthly user rates and charges may need to be analyzed to determine if adjustments are required for loan repayment.

VI. DESCRIPTION OF EVALUATED ALTERNATIVES

No Action: The no-action alternative was rejected because it would not address the need for additional water storage or the need for an alternative water supply during peak demand conditions.

Optimum Operation of Existing Facility: This alternative was rejected because it would not provide needed water storage for the utility and would not address needed repairs.

Rehabilitation of Existing Storage Tanks: This alternative would not address the need for additional water storage and was rejected.

Expansion and Upgrade of Facilities (Selected Alternative): This alternative considered replacement of the 100,000 gallon Greenville standpipe with a 400,000 gallon elevated storage tank; relocation of a booster pump station to a location where it could be used to boost water pressure from the Indiana American Water Company system and provide an alternative water supply; and construction of a new 12-inch water main to connect the Greenville Water Utility system to the Indiana American Water Company system. This alternative was selected since it will provide additional water storage and an alternative supply from Indiana American Water Company.

VII. ENVIRONMENTAL IMPACTS OF THE FEASIBLE ALTERNATIVES

A. Direct Impacts of Construction and Operation

Undisturbed/Disturbed Land: The proposed projects will not affect archaeological resources. Project sites have been disturbed by previous construction activity.

Structural Resources (Figures 4 & 5): The projects will not affect historic sites or districts. The SRF's finding pursuant to Section 106 of the Historic Preservation Act is: "no historic properties affected."

Surface Waters: The elevated tank construction and booster pump station construction will not affect surface waters. The water main construction will require crossing an intermittent stream; the crossing may be bored. The project will not adversely affect natural, scenic, or recreational rivers and streams or waters of high quality or exceptional use streams.

Wetlands: There are no wetlands located in the project area.

100-Year Floodplain: None of the project is located in a 100 year floodplain.

Groundwater: Excavation for the project will be minimal and any impact to groundwater would be minor and temporary in nature. A detailed geotechnical investigation will be performed during design to verify groundwater will not be an issue.

Plants and Animals: The projects will not affect endangered species. Some tree removal along the edge of roads will occur with the water main and booster pump station construction. Tree removal will be kept to a minimum and the construction corridor kept to a width of approximately 10 to 15 feet.

Prime Farmland: The project will not affect prime/unique farmland.

Air Quality: Air quality will be temporarily impacted by construction activities, including vehicle exhaust and dust.

Open Space and Recreational Opportunities: The proposed project will neither create nor destroy open space and recreational opportunities.

National Natural Landmarks: The proposed project will not affect National Natural Landmarks.

B. Indirect Impacts

The town's Preliminary Engineering Report (PER) states: *The Town of Greenville/Greenville Water Utility, through the authority of its council, planning commission or other means, will ensure that future development, as well as future collection system or treatment works projects connecting to SRF-funded facilities will not adversely affect wetlands, wooded areas, steep slopes, archaeological/historical/structural resources or other sensitive environmental resources. The town will require new development and treatment works projects to be constructed within the guidelines of the U.S. Fish and Wildlife Service, IDNR, IDEM, and other environmental review authorities.*

C. Comments from Environmental Review Authorities

The IDNR Division of Historic Preservation and Archaeology (DHPA), in correspondence dated October 12, 2010 stated: *Based upon the documentation available to the staff of the Indiana SHPO [State Historic Preservation Officer], we have not identified any historic buildings, structures, districts, or objects listed in or eligible for inclusion in the National Register of Historic Places within the probable area of potential effects.No archeological investigations appear necessary provided that all project activities remain within areas disturbed by previous construction.*

In correspondence dated December 7, 2010, the DHPA stated: *We concur with the Town of Greenville's November 29, 2010 finding that there are no historic buildings, structures, districts, objects, or archaeological resources within the area of potential effects that will be affected by the above indicated project.*

This identification is subject to the following condition:

- *The project activities remain within areas disturbed by previous construction.*

If any archaeological artifacts or human remains are uncovered during construction, demolition, or earthmoving activities, state law (Indiana Code 14-21-1-27 and 29) requires that the discovery must be reported to the Department of Natural Resources within two (2) business days. In that event, please call (317) 232-1646. Be advised that adherence to Indiana Code 14-21-1-27 and 29 does not obviate the need to adhere to applicable federal statutes and regulations.

The U.S. Fish and Wildlife Service, in correspondence dated September 6, 2010, stated: *These comments have been prepared under the authority of the Fish and Wildlife Coordination Act (16 U.S.C. 661 et. Seq.) and are consistent with the intent of the National Environmental Policy Act of 1969, the Endangered Species Act of 1973, and the U.S. Fish and Wildlife Service's Mitigation Policy.*

Based on a review of the information you provided, the U.S. Fish and Wildlife Service has no objections to the project as currently proposed.

The Natural Resources Conservation Service, in correspondence dated October 29, 2010 and February 23, 2011 noted that the projects *will not cause a conversion of prime farmland.*

The IDNR Environmental Unit, in correspondence dated October 20, 2010, stated: *This proposal will require the formal approval for construction in a floodway under the Flood Control Act, IC14-28-1....*

The Natural Heritage Program's data have been checked. To date, no plant or animal species listed as state or federally threatened, endangered, or rare have been reported to occur in the project vicinity.

Avoid areas of concern to fish, wildlife, and botanical resources to the greatest extent possible. Be prepared to demonstrate avoidance, minimization, and mitigation of impacted resources. The following are recommendations for potential impacts identified in the proposed project area:

We recommend that all creek or stream crossings with utility lines be done using the directional bore method. A minimum of 3' of cover should be provided from the top of the pipe to the thalweg of the stream. Should the directional bore method not be feasible at any of the planned stream crossings due to the site conditions and the open-trenched method is necessary, then the following measures should be implemented:

- 1) When using the open trench method, the utility line should be installed as quickly as possible to avoid silt and sediment loading of the stream.*
- 2) The utility line should be covered with graded stone or riprap to protect the section of trench below the normal water level from scour or erosion (any stone*

or riprap fill in the streambed should remain at the existing streambed level to avoid creating a fish passage obstruction).

- 3) *Riprap may not be placed in the active thalweg channel or placed in the streambed in a manner that precludes fish or aquatic organism passage (riprap should not be placed above the existing streambed elevation).*

Restore disturbed streambanks using bioengineering bank stabilization methods. The following is a link to a USDA/NRCS document that outlines many different bioengineering techniques for streambank stabilization:

<http://directives.sc.egov.usda.gov/17553.wba> (Choose Handbooks; Title 210 Engineering; National Engineering Handbook; Part 650 Engineering Field Handbook. Choose Chapter 16 from next window). Revegetate disturbed banks with native trees, shrubs and herbaceous plants. Stream bank slopes after project completion should be restored to stable-slope steepness (not steeper than 2:1).

Impacts to non-wetland forested habitat under 1 acre should be mitigated by planting five trees, at least 2 inches in diameter-at-breast height (dbh), for each tree which is removed that is ten inches or greater in dbh. Impacts to non-wetland forest over 1 acre should be mitigated at a minimum 2:1 ratio.

Fish, wildlife, and botanical resource losses as a result of this project can be minimized through implementation of the following measures.

Revegetate all bare and disturbed areas with a mixture of grasses (excluding all varieties of tall fescue), legumes, and native shrub and hardwood tree species as soon as possible upon completion.

Minimize and contain within the project limits inchannel disturbance and the clearing of trees and brush.

Appropriately designed measures for controlling erosion and sediment must be implemented to prevent sediment from entering the stream or leaving the construction site; maintain these measures until construction is complete and all disturbed areas are stabilized.

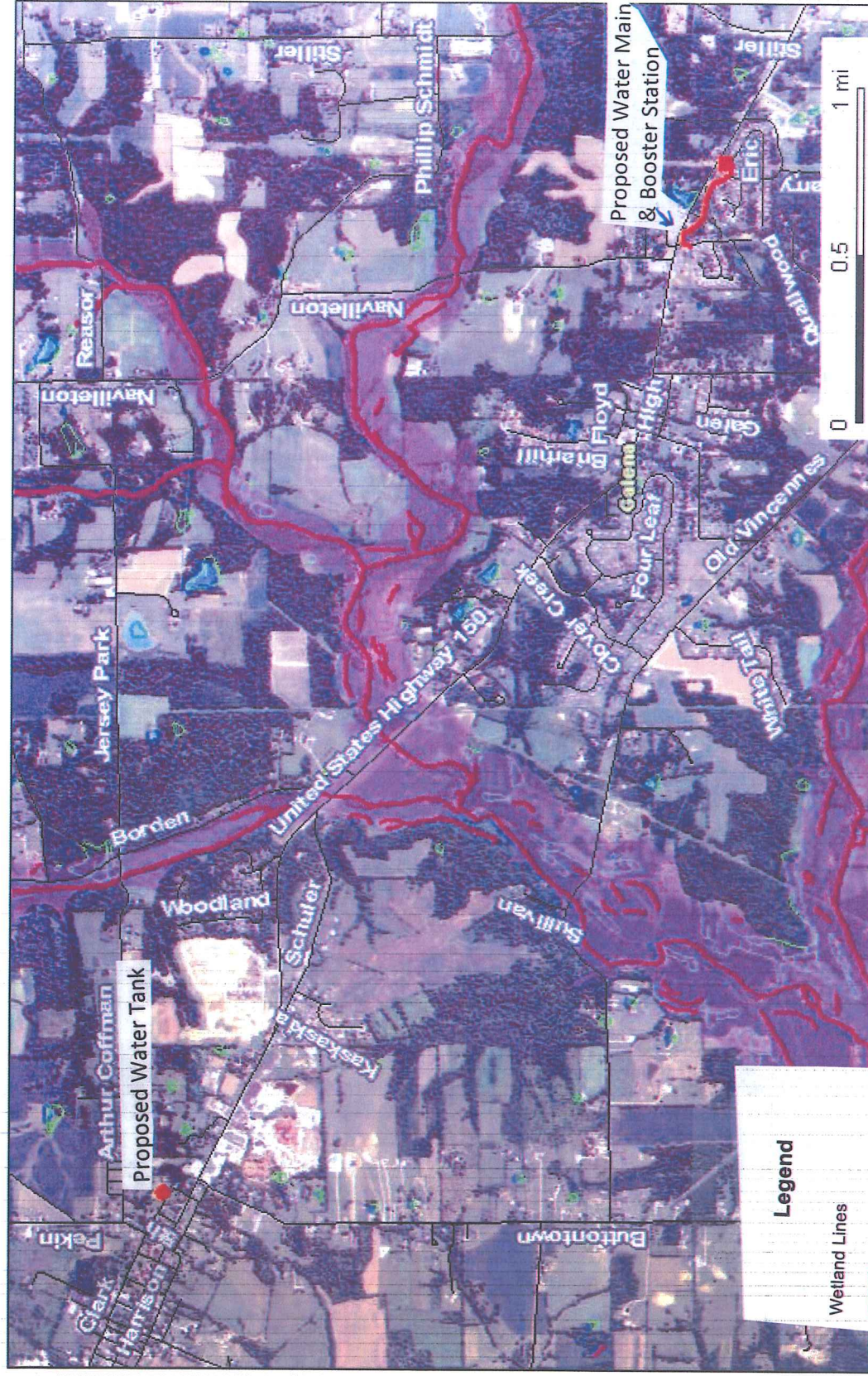
Seed and protect disturbed stream banks and slopes that are 3:1 or steeper with erosion control blankets (follow manufacturer's recommendation for installation); seed and apply mulch on all other disturbed areas.

VIII. MITIGATION MEASURES

The PER states: Erosion control measures will be used during construction of each of the projects.... Also construction will be limited to normal working times.... Any tree clearing will be minimized....

IX. PUBLIC PARTICIPATION

A properly noticed Public Hearing was held on December 13, 2010 at 6:00 pm at the Greenville Town Hall. Members of the public did not attend; the town did not receive written comments during the five-day period following the public hearing.



using data believed to be accurate; however, a margin of error is inherent in all maps. This product is distributed "AS-IS" without warranties of
t limited to warranties of suitability of a particular purpose or use. There is no attempt in either design or production of this map to define the limits
t. A detailed on-the-ground survey and historical analysis of a single site may differ from this map.

Indiana Geological Survey

**FIGURE 1: Greenville Water Utility
Drinking Water Improvements
SRF # 10 15 22 01**



Scale 1" = 100'

There are no wetlands or 100-year floodplains in the project area.

Revised 3/9/2011

GREENVILLE TANK
SITE PLAN

FLOYD COUNTY, INDIANA

JACOBI, TOOMBS & LANZ, INC.
CONSULTING ENGINEERS
120 BELL AVENUE
CLARKSVILLE, INDIANA 47129
(812) 288-6646

FIGURE
2

SCALE: 1" = 100'

DATE: 9-9-2010

DRAWN: N.A.T./J.A.M.

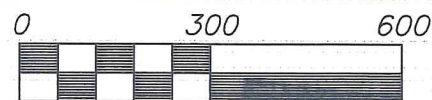
CHECKED: A.R.S.

APPROVED: J.I.L.



There are no wetlands or 100-year floodplains in the project area.

Revised 3/9/2011



Scale 1" = 300'

**BOOSTER STATION & WATER MAIN
SITE PLAN**

FLOYD COUNTY, INDIANA

JACOBI, TOOMBS & LANZ, INC.
CONSULTING ENGINEERS
120 BELL AVENUE
CLARKSVILLE, INDIANA 47129
(812) 288-6646

**FIGURE
3**

SCALE: 1" = 300'

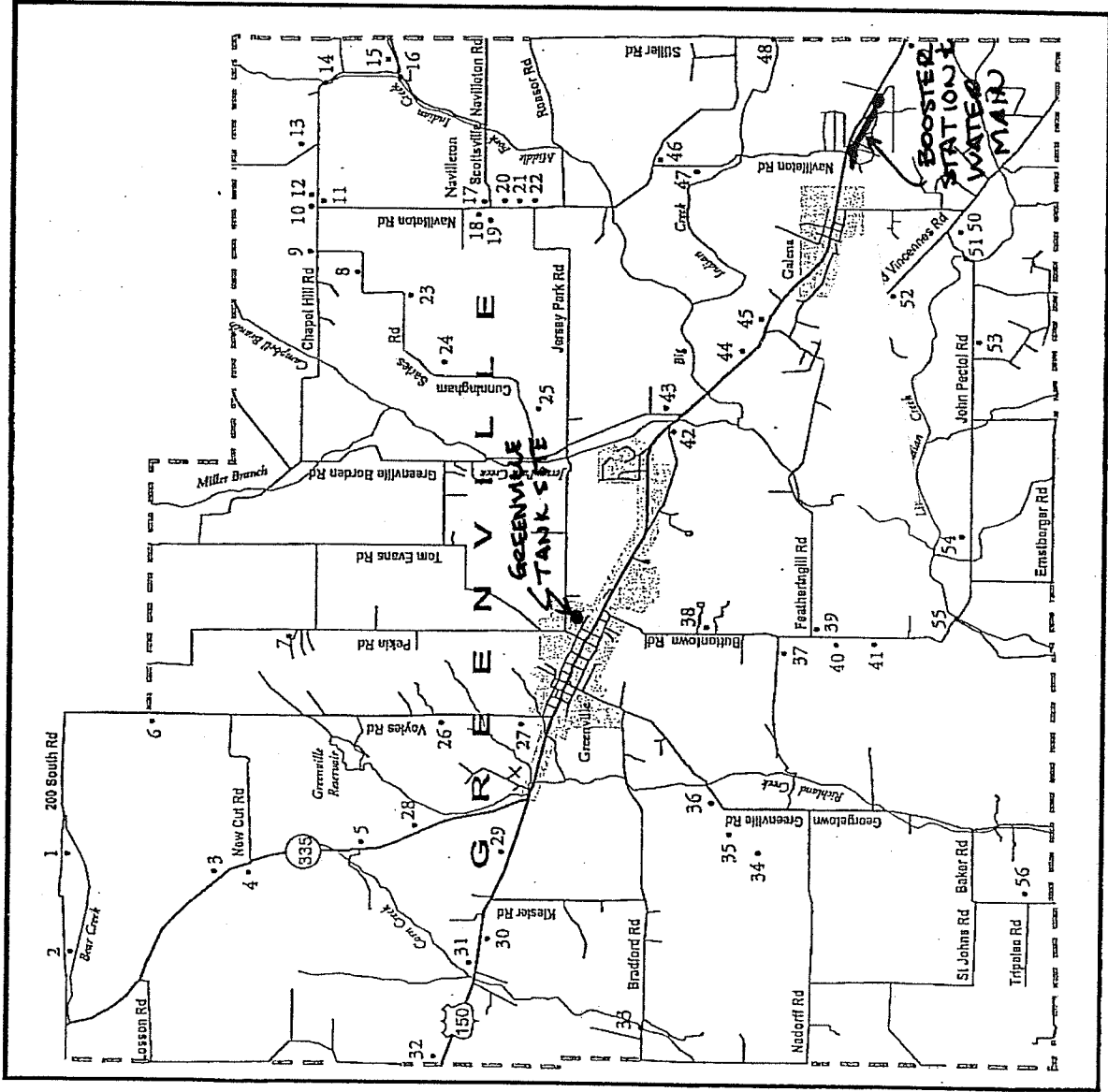
DATE: 9-9-2010

DRAWN: N.A.T./J.A.M.

CHECKED: A.R.S.

APPROVED: J.I.L.

Greenville Township (40001-056)



REV. 3/9/11

FIGURE 4: from Floyd County Interim Report
Indiana Sites and Structures Inventory

In 1805, when the Boston family of North Carolina first settled in the hilly area that would become Greenville Township, New Albany was still a wilderness and Indiana statehood was still eleven years away. The Bostons followed Indian trails and settled along Indian Creek near Galena in the county's northwest corner. This area of Indian Creek contained a natural salt lick that drew many animals; the main Indian trail that led from the Falls of the Ohio to Vincennes passed through this section of easy hunting. When whites followed this trail in the early 1800s at least six Indian encampments had spent time hunting here during the year.

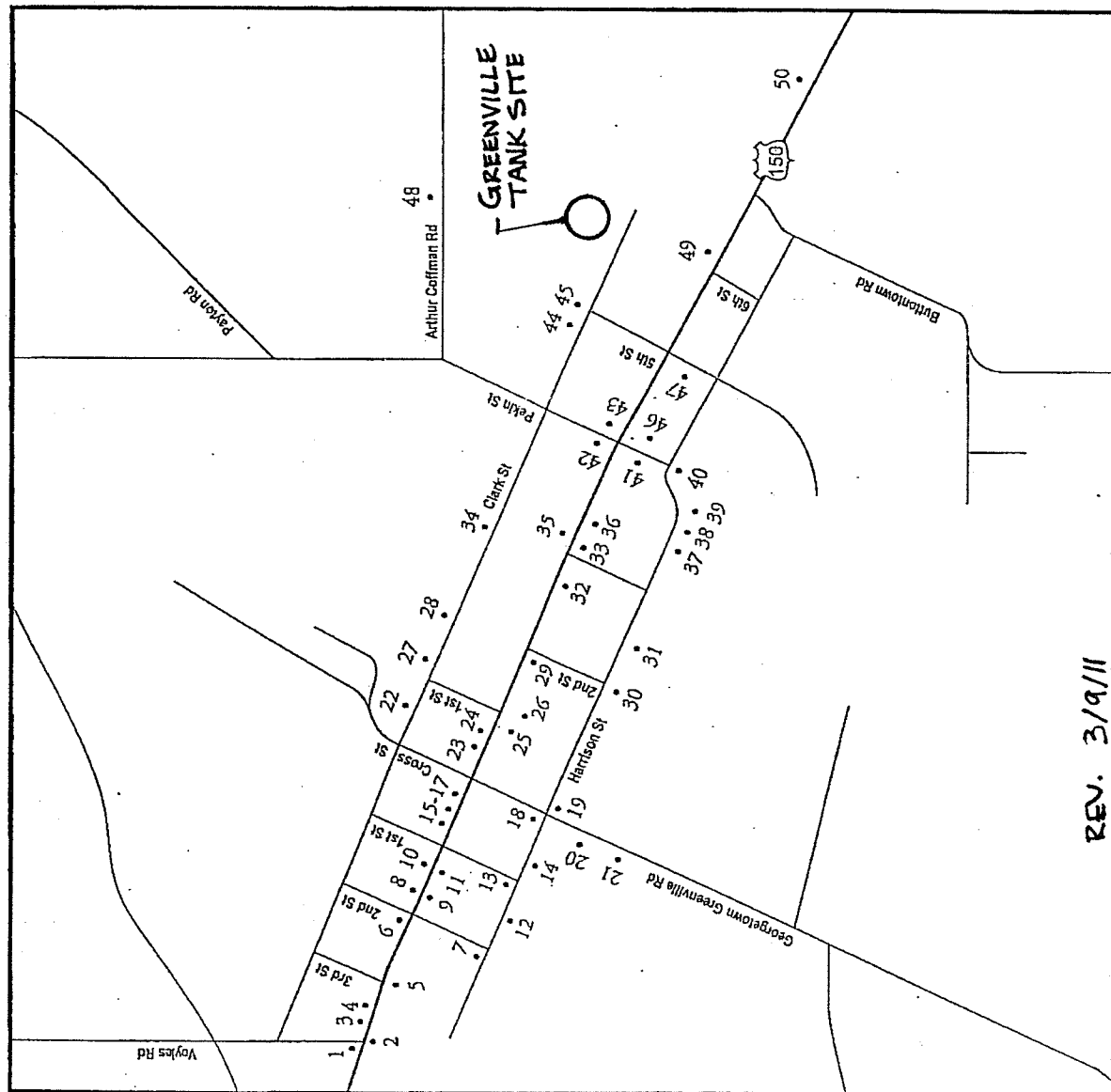
It was not until a Kentucky school teacher named Andrew Mendall bought 160 acres a year later in 1806 that whites began to settle in earnest. Mendall and early residents spent ten years building numerous block houses as a form of protection against Indian raids. By 1816 enough settlers lived in the area to compel Mendall to sell part of his parcel to partner Ben Haines, and together they platted Greenville.

Some of the state's finest white oak was found in Greenville Township and spurred businesses interests. In 1826 a clock making factory was the first manufacturer in Greenville, and the area attracted numerous coopers whose barrels became a staple industry in the county. Unfortunately, no railroad laid tracks in the town and doomed its chances for further growth.

Just north of Galena is the small outpost called Navilleton, or Navilaton. In 1845 parishioners from St. Mary's of the Knobs Church built a parish church there after the Kinberger family donated land. The current cemetery is located where the first log church stood. Due to its small size the parish was served by neighboring priests and St. Mary's of Navilleton (40019) did not become an independent parish until the early 1900s.

The first schools in the area were subscription until

Greenville Scattered Sites (41001-050)



In 1806 an enterprising Kentucky school teacher named Andrew Mendall purchased 160 acres that would become the town of Greenville. In 1816 Mendall and partner Ben Haines platted the town before Floyd County officially formed. They dreamed big and platted a large town with a public square. By 1819 Greenville rivaled New Albany for the county seat. New Albany's founders, the Scribner brothers, however donated a sum of money and a bell for the new courthouse and thus retained the coveted seat.

Greenville lays along the New Albany and Paoli Turnpike, roughly twelve miles north of New Albany, which helped its early commerce. The New Albany and Paoli Pike Company built twin covered bridges circa 1831 to span Indian Creek. They stood within 150 yards of each other until they were removed in 1923. A stagecoach carried passengers and mail, and early businesses housed in log cabins included general stores and flour mills. The county commissioners regulated prices at the local taverns, as was common practice at the time, but trades were also acceptable methods of payment. According to Floyd County Commissioners' records from 1819, the price for lodging was 12.5 cents, breakfast could cost no more than 31.5 cents, and a ½ pint of peach or apple brandy cost 18.75 cents.

It was not until 1879, before Greenville was officially surveyed and incorporated, that its development slowed, as it would through the twentieth century. Despite this, it remains Floyd County's second largest town. Poet Calvin Goss was a Greenville native, and his collection of poems entitled *The Vision of Tassio and Other Poems* is still celebrated locally today.

Historical buildings of interest in Greenville include the Simpson Memorial United Methodist Church (41019), listed on the National Register of Historic Places, the Jesse Smith House (41041), and the 1850 Greenville

FIGURE 5: from Floyd County Interim Report
Indiana Sites and Structures Inventory